

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended) Strapping machine comprising
a strap extension, retrieval and pulling unit ~~(13) comprising in turn~~ having a
motor and a powered main wheel (18) around which ~~the~~ a strap (12) winds partially
~~to be moved~~ for powered movement of the strap in both opposite directions, and
~~characterized in that~~

two selectable mechanisms ~~are provided~~ for transmission of movement from
the motor to the main wheel with the first mechanism causing rotation of the main
wheel (18) at a first speed and rotation of an auxiliary traction wheel (21) which is
pressed against the main wheel with interposition of the strap near ~~the~~ an input zone
of the strap on the main wheel to effect pulling of the strap and the second mechanism
causing rotation in ~~both opposite~~ directions of the main wheel (18) at a second speed
greater than the first speed to effect extension and retrieval of the strap while the
auxiliary traction wheel (21) is at ~~some~~ a distance from the main wheel, ~~with and~~

a control device (50) operating alternately the first mechanism ~~or~~ and the second mechanism to realize in rapid succession extension, retrieval and pulling of the strap.

Claim 2 (Currently Amended) Machine in accordance with claim 1 ~~characterized in that~~ , wherein the first mechanism comprises a lever (24) on which is mounted the auxiliary pulling wheel (21) and which is movable on command of ~~moving-lever handling~~ means (27, 28) between a first non-operational position in which the auxiliary pulling wheel (21) is moved away from the main wheel (18) and a second operational position in which the auxiliary pulling wheel (21) is pressed against the main wheel (18).

Claim 3 (Currently Amended) Machine in accordance with claim 2 ~~characterized in that~~ , wherein the auxiliary pulling wheel (21) is connected to a motion transmission for its rotation and has a shaft connected to a first gear (32) which engages in a rotation gear (30) of the main wheel (18) when the lever (24) is moved to the operational position.

Claim 4 (Currently Amended) Machine in accordance with claim 3 characterized in that, wherein the motion transmission of the auxiliary pulling wheel (21) ~~comprises~~ includes a second gear (33) connected to ~~the~~ a shaft of the auxiliary wheel (21) and which engages in a powered gear (34).

Claim 5 (Currently Amended) Machine in accordance with claim 4 characterized in that ~~the~~ wherein a first pair made up of the first gear (32) of the auxiliary wheel and the gear (30) for rotation of the main wheel has a module of the teeth which is lower than ~~the~~ a module of ~~the~~ teeth of ~~the~~ a second pair made up of the second gear (33) of the auxiliary wheel and the powered gear (34) so as to hold the teeth of the second pair in contact even when the lever is moved into ~~its~~ the non-operational position.

Claim 6 (Currently Amended) Machine in accordance with claim 3 characterized in that, wherein the lever handling means ~~comprise~~ include a cam mechanism (27) for thrusting the lever towards ~~its~~ the operational position with predetermined adjustable force.

Claim 7 (Currently Amended) Machine in accordance with claim 6 ~~characterized in that~~ , wherein the lever handling means also ~~comprise~~ include an electromagnet device (28) for effecting a first partial movement from the non-operational position towards the operational position until engagement of the teeth of the first gear (32) in the teeth of the rotation gear (30) of the main wheel.

Claim 8 (Currently Amended) Machine in accordance with claim 7 ~~characterized in that~~ , wherein the control device (50) commands in sequence first the electromagnetic device to effect ~~the~~ engagement movement of the teeth of the first gear (32) in the teeth of the rotation gear (30) of the main wheel and then the cam mechanism (27) to press the auxiliary pulling wheel (21) against the main wheel (18) with predetermined force.

Claim 9 (Currently Amended) Machine in accordance with claim 6 ~~characterized in that~~ , wherein the second mechanism ~~comprises~~ includes two gears arranged in series with one of the two gears (41, 42) engaging in a rotation gear (30) of the main wheel and with the two gears being powered through respective clutches (43, 44) engageable on command ~~in such a manner as~~ to cause rotation of the main

wheel in one direction or ~~the other~~ another direction depending on which ~~clutch of the~~ respective clutches is engaged.

Claim 10 (Currently Amended) Machine in accordance with claim 1 ~~characterized in that it comprises~~ , further comprising another auxiliary wheel (22) which presses the strap with predetermined force against the main wheel (18) in a position near ~~the~~ an outlet zone of the strap from the main wheel ~~in such a manner as~~ to produce a desired traction on the strap during the extension step.

Claim 11 (Currently Amended) Machine in accordance with claim 1 ~~characterized in that it comprises~~ , further comprising another intermediate auxiliary wheel (23) which presses the strap with predetermined force against the main wheel (18) in an intermediate position along ~~the~~ a strap winding path on the main wheel in such a manner as to produce a desired traction on the strap during the retrieval step.

Claim 12 (Currently Amended) Machine in accordance with claim 11 ~~characterized in that~~ , wherein the intermediate auxiliary wheel (23) has a stop sensor which signals to the control device (50) stopping of the intermediate auxiliary wheel caused by slipping of the strap on the main wheel.